

**VALIDATION OF THE MALAY VERSION SELF-EFFICACY
QUESTIONNAIRE FOR SCHOOL SITUATIONS AND STRUCTURAL
RELATIONSHIP BETWEEN DEMOGRAPHIC PROFILES AND LEVELS OF
SELF-EFFICACY AMONG EARLY ADOLESCENTS IN PRIMARY SCHOOLS,
KOTA BHARU**

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DECLARATION

I declare that the work contained herein is my own except where explicitly stated otherwise. Where I have quoted from the work of others, the source is duly acknowledged.

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LIST OF ABBREVIATIONS AND SYMBOLS

| | |
|--------|--|
| AVE | Average Variance Extracted |
| CFI | Comparative Fit Index |
| CFA | Confirmatory Factor Analysis |
| CI | Confidence Interval |
| CITC | Corrected Item Total Correlation |
| CR | Construct Reliability |
| EFA | Exploratory Factor Analysis |
| ICC | Intraclass Correlation Coefficient |
| KMO | Kaiser–Mayer–Olkin |
| ML | Maximum Likelihood |
| MLR | Robust Maximum Likelihood Estimator |
| RMSEA | Root Mean Square of Approximation |
| SAD | Separation Anxiety Disorder |
| SE | Standard Equation |
| SEM | Structural Equation Modelling |
| SEQ–SS | Self–Efficacy Questionnaire for School Situations |
| SES | socioeconomic status |
| SRAS | School Refusal Assessment Scale |
| TLI | Tucket Lewis Index |
| VFI | Variance Inflation Factor |
| WLSMV | Weighted Least Squares Means and Variance Adjusted |
| WRMR | Weighted Root Mean Square Residual |
| | standardized regression weights of pathways |
| n | sample size |
| % | percentage |

ABSTRAK

Validasi Soal-selidik Keberkesanan Kendiri untuk Situasi-situasi Persekolahan Versi Bahasa Melayu dan Struktur Hubung–kait Antara Faktor–faktor Demografi dengan Tahap Keberkesanan Kendiri Di Kalangan Pelajar–pelajar Di Awal Keremajaan Dari Sekolah–Sekolah Rendah di Kota Bharu

Latar belakang: Tahap keberkesanan kendiri yang rendah diandaikan menjadi punca kepada masalah ketidakhadiran ke sekolah. Dalam kajian ini, Soal–selidik Keberkesanan Kendiri Untuk Situasi–situasi Persekolahan diterjemahkan ke Bahasa Melayu dan dinilai kesesuaian penggunaannya di kalangan pelajar–pelajar tempatan. Satu konsep kerangka yang menghubungkan faktor–faktor demografi dengan tahap keberkesanan kendiri pelajar–pelajar turut dikenalpasti.

Kaedah: Kaedah tinjauan soal–selidik menggunakan rekabentuk keratan rentas dilakukan ke atas pelajar–pelajar berusia sepuluh dan sebelas tahun dari lima buah sekolah yang dipilih secara rawak melalui pensampelan berkelompok dengan komposisi populasi yang berkadar. Penterjemahan dilakukan secara dua arah bagi kesemua 25 item–item, yang kemudiannya dijawab oleh dua ratus lima belas orang pelajar. Analisa penerokaan faktor ke atas Soal–selidik Keberkesanan Kendiri Untuk Situasi–situasi Persekolahan telah dijalankan dan melibatkan seramai dua ratus lima belas orang pelajar. Konsistensi dalaman dan kestabilan soal–selidik tersebut turut dianalisa. Seterusnya, dua ratus lapan

belas orang pelajar lagi diambil untuk permodelan persamaan struktural. Pendekatan ini terbahagi kepada analisa pengesahan faktor untuk menentukan sebuah model ukuran, yang kemudiannya dijadikan asas kepada model struktural untuk menggambarkan hubung–kait antara faktor–faktor demografi dengan keberkesanan sendiri semasa menghadapi situasi–situasi persekolahan. Skor untuk populasi kajian ini telah dianggar dengan menggunakan min dan sisihan piawai. Kesemua analisa statistik telah dijalankan dengan perisian SPSS versi 22 dan Mplus versi 7.3.

Keputusan: Analisa penerokaan faktor telah mengenalpasti empat faktor yang berkaitan keberkesanan sendiri secara teori dan boleh menjelaskan varian kumulatif sebesar 46%. Keputusan ini berbeza sedikit berbanding kajian asal. Konsistensi dalaman adalah memadai dengan nilai Cronbach's alpha di antara 0.643 dan 0.674. Nilai korelasi intra–kelas pada 0.672 mempamerkan kestabilan yang memadai. Model yang terbaik selepas lelaran klasifikasi ulangan dalam analisa pengesahan faktor terdiri daripada 18 item yang berkelompok dalam dua faktor berasingan. Memandangkan tidak semua item yang tergolong dalam faktor kedua berkait antara satu sama lain untuk menghasilkan tema yang sekata, penyelesaian tiga faktor yang terdiri daripada “Keberkesanan Kendiri dalam Situasi Pemisahan”, “Keberkesanan Kendiri dalam Situasi Sosial dan Situasi Peribadi yang Mencabar” dan “Keberkesanan Kendiri dalam Situasi Konflik Dalaman” telah diterima sebagai model akhir. Analisa jalur mencerminkan wujudnya hubung–kait antara struktur keluarga dan keberkesanan seseorang pelajar dalam menangani situasi–situasi persekolahan yang memerlukan berpisah dengan keluarganya dan juga situasi–situasi yang boleh mencetuskan

konflik dalaman. Status sosioekonomi keluarga pula didapati mempunyai hubung-kait dengan kebolehan seseorang pelajar untuk menangani situasi pemisahan. Skor purata populasi ini ialah 68.1 bagi pelajar perempuan (sisihan piawai = 9.6) dan bagi pelajar lelaki ialah 65.1 (sisihan piawai = 10.1).

Kesimpulan: Kehadiran ke sekolah adalah bergantung kepada proses kognitif seseorang pelajar yang boleh dinilai sendiri dengan menggunakan Soal-selidik Keberkesanan Kendiri Untuk Situasi-situasi Persekolahan versi Bahasa Melayu, yang menunjukkan nilai psikometrik yang baik dikalangan remaja awal di Kota Bharu. Penekanan perlulah diberikan kepada hubungan dalaman yang ketara di antara tahap keberkesanan sendiri dengan dua faktor demografi iaitu tahap sosioekonomi sesebuah keluarga dan struktur keluarga tersebut, khususnya semasa menentukan jenis intervensi psikologi bagi pelajar yang mempunyai tahap keberkesanan sendiri yang rendah.

ABSTRACT

Validation of the Malay Version of the Self-Efficacy Questionnaire for School Situations and Structural Relationship of Demographic Profiles and Levels of Self-Efficacy Among Early Adolescents in Primary Schools, Kota Bharu

Introduction: Low self-efficacy is posited to underlie problematic school attendance. This study examined validity and reliability of the Malay version Self-Efficacy Questionnaire for School Situations (SEQ-SS) among school-going early adolescents from primary schools of Kota Bharu. The author also sought the structural relationship between demographic characteristics of these early adolescents and their perceived self-efficacy.

Methods: Employing a cross-sectional design, students aged ten and eleven from 5 randomly selected schools were recruited with proportionate cluster sampling method. The 25-item Self-Efficacy Questionnaire for School Situations (SEQ-SS-25), was translated into Malay using forward backward translation. Validity was examined with exploratory factor analysis (EFA) in two hundred and fifteen students. The internal consistency and test-retest reliability were determined. A further two hundred and eighteen students were recruited for structural equations modelling (SEM), in which the measurement model was examined using confirmatory factor analysis (CFA), before proceeding to describe a structural model of demographic variables and perceived efficacy for

school situations. Mean and standard deviation were used to describe the scores. SPSS 22 and Mplus 7.3 were used.

Results: EFA generated four theoretical factors which differed slightly from the original SEQ–SS–25. A total of 19 items of moderately high factors loadings remained, accounting for 46% of variance. Internal consistency was adequate with Cronbach’s alpha ranging between 0.643 to 0.674. ICC of 0.672 demonstrated adequate stability. The best fitting model after iterative respecification in CFA consisted of 18 items clustering into a two factors, but not all items within the second factor were related to a unifying theme. Thus, a three–factor solution comprising of “Self–efficacy in Separation Situations”, “Self–efficacy in Socially and Personally Challenging Situations” and “Self–efficacy in Situations of Disengagement from School” was accepted as the final model. Path analysis reflected significant associations between family structure and efficacy in dealing with separation and disengagement from school, as well as family socioeconomic status with one’s ability to cope with separation situations. Mean SEQ–SS scores were 68.1 for females (Standard deviation = 9.6) and 65.1 for males (Standard deviation = 10.1).

Conclusion: School attendance is motivated by cognitive processes that can be self–rated using the SEQ–SS. The Malay version showed good psychometric properties among early adolescents in Kota Bharu. Emphasis should be given to significant inter–relationships between perceived self–efficacy and two demographic factors, namely socioeconomic status and family structure, when

deciding on psychological interventions for individuals with low perceived efficacy.

Keyword: self-efficacy, primary school, early adolescents, school situations, Malay

CHAPTER 1

OVERVIEW OF STUDY

1.1. Introduction

School refusal, a child-motivated reluctance or outright refusal to attend or remain in school, is a common cause of chronically poor school attendance and often misclassified as truants. In reality, school refusal depicts a symptom, heralding the need for early intervention before development of a more pervasive mental health disorder. Where the problem becomes incarcerated and the school refusal persists for months to years, the child or adolescent will commonly present with coexisting anxiety or depressive disorders. Perceived self-efficacy had been posited to be a major regulator in the maintenance of behaviours in general and among school refusers efficacy levels are lower than normal school-going adolescents. This study examined the validity and reliability of the Malay version Self-Efficacy Questionnaire for School Situations (SEQ-SS) as an objective measure of the cognitive processes that contribute to school attendance of early adolescents in primary schools of Kota Bharu. The structural relationships between observed demographic characteristics of these early adolescents and their perceived self-efficacy when faced with school-related situations are also determined. This study on normal-school going early adolescents will pave the way towards future in-depth exploration of the gravity of school refusal behaviour among Malaysian students.

1.2. Study Background

Problematic school attendance amongst students has unremittingly been a major concern in developed and developing countries across the world (Heyne, Sauter, Ollendick, Van Widenfelt, & Westenberg, 2014). Governments and communities at large devote intense attention to attainment of education in general, and school attendance specifically (Ministry of Education Malaysia, 2013). Chronically poor school attendance deprives a child from educational opportunities (Carroll, 2010), in addition to missing out on basic social, emotional and health services (Gresham, Vance, Chenier, & Hunter, 2013). This potentially preventable phenomena have been invariably linked to negative outcomes, both short– and long–term during ensuing adulthood manifesting as:

- i. negative impact on learning and achievement (Carroll, 2010),
- ii. early school drop–out (Christle, Jolivette, & Nelson, 2007),
- iii. social withdrawal (King et al., 1998), poor social adjustment (Valles & Oddy, 1984),
- iv. psychopathology and mental health problems in late adolescence and adulthood (Egger, Costello, & Angold, 2003; McShane, Walter, & Rey, 2001).

Given the heterogeneous reasons a student may be absent from school, numerous terms and classification systems have been developed to illustrate the problem of persistent school absenteeism:

- i. *Truancy* – unwarranted absenteeism from school that the student intentionally concealed from parental or teachers' awareness (Kearney, 2008)
- ii. *School withdrawal/ with-holding* – being kept away from school deliberately despite being an unauthorised absence in accordance to education acts in most countries (Gupta & Lata, 2014; Kearney, 2008; Thambirajah, Grandison, & De-Hayes, 2007)
- iii. *School refusal* – child–motivated reluctance or outright refusal to attend or remain in school (Berg, 1997; Hersov, 1960)

This taxonomic distinction is vital because '*school refusers*' have often been misclassified by education authorities as truants (Thambirajah et al., 2007). Evidence from the wealth of earlier research has linked this group of students who refused school with severe emotional distress, but in whom there is absence of antisocial tendencies and delinquency, thus distinguishing them from truancy (Berg, 1997; Havik, Bru, & Ertesvåg, 2015; Hersov, 1960). The lack in awareness that school refusal depicts a symptom (Inglés, González-Maciá, García-Fernández, Vicent, & Martínez-Monteagudo, 2015), and is not in itself a syndrome, leads to delayed detection, unavailability of effective interventions, and encapsulation of comorbidities directly or indirectly associated with the school refusal behaviour. By the time these students are referred for assessment because of school refusal behaviour, they would already have presented with mental health conditions like stressor–related, anxiety or depressive disorders (Egger et al., 2003; Inglés et al., 2015; Lyon & Cotler, 2007; McShane et al., 2001; Wherry & Marrs, 2008).

Development and maintenance of a problem like school refusal typically involve heterogeneous risk factors and processes (Elliott, 1999; Heyne et al., 2014; Inglés et al., 2015). To conceptualize a case of school refusal, researchers have recommended various assessment methods and procedures, based on hypothesized models that the refusal context is influenced by its clinical diagnostic groupings, functional system of behaviour, and cognitive factors. Symptomatic models are supported by earlier accounts that children refused school because of neurosis of obsessional type (Broadwin, 1932), and school phobia (Johnson, Falstein, Szurek, & Svendsen, 1941). Interestingly, pathological mother–child relationships has been ascribed to be a communality in the children of those case series (Broadwin, 1932; Johnson et al., 1941). Succeeding studies also support co–morbidity with *Diagnostic and Statistical Manual of Mental Disorders (DSM)* diagnoses like depressive and anxiety disorders (Berg et al., 1993; Egger et al., 2003; Ek & Eriksson, 2013), and stressor-related disorders (Wherry & Marrs, 2008). Such tenets bring forth to nosologies like ‘anxious school refusers’, or ‘emotionally based school refusal’, and will undoubtedly guide treatment of children who refused to attend school due to underlying psychiatric disorders. On the other hand, if management depends solely on clinical classification systems, this will inevitably produce over–medicalization, the ensuing stigma of having the diagnosis of a mental illness, and the child will suffer further ostracization in schools (Yamazaki, 1994).

Applying the operant conditioning principles to the problem of school refusal behaviour (Skinner, 1953), a functional approach based on child–motivation

establishes the factors maintaining school refusal (Kearney & Silverman, 1990). This hypothesis underlie the development of the School Refusal Assessment Scale (Kearney & Silverman, 1993), which enables measurement of the functional dimensions for a child's refusal to attend school, and sub-classification into positive reinforcers (i.e., attention-getting, positive tangible reinforcement) or negative reinforcers (i.e., avoidance, escape). The Kearney and Silverman's Functional Model of School Refusal contributed tremendously in the advances of research on school refusal. Their introduction of child, parent, and teacher scoring scales to identify reinforcing factors sustaining school refusal behaviour greatly helped guide individualized treatment processes. Nonetheless, school refusal typically involve multiple risk factors and processes, including — but not limited to — the child's incentive to stay away from school; thus rendering Kearney's term child-motivated attendance problems a misnomer. This is exemplified in a sample of students referred to social workers for school refusal, three functional profiles were identified – the positively reinforced school refusal profile, multiple (with both positively and negatively reinforced) profile and the group without any specific functional profiles – therefore providing evidence that it is possible that these students are manifesting other types of school refusal behaviour that may not be child-motivated (Dube & Orpinas, 2009).

A separate group of therapists postulates that the cognitions of children with school refusal play a key role in the manifestation of the behaviour (Heyne et al., 1998). Utilising the cognitive model in the conceptualization and assessment of school refusal behaviour avoids the need to confer a sick role

by matching with existing diagnostic clinical syndromes, nor does it imply any blame on the child for refusing to go to school. Earlier attempts to explain school refusal with operant conditioning principles were found insufficient as the interactions between a behaviour and a reinforcer does not occur unconsciously (Heyne et al., 1998), and more importantly this model failed to consider psychosomatic problems (Havik et al., 2015). There will be ongoing cognitive processes that will recognise the links between contingent events, and thereafter integrate all available information relating to one's aptitude or self-assurance that the behaviour necessary to generate the desired outcomes can be successfully executed (Bandura, 1977, 1993). Self-efficacy was theorized to be the driving mechanism of a person's behaviour (Bandura, 1977). Self-efficacy affects self-regulation abilities (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003), influences life satisfaction (Vecchio, Gerbino, Pastorelli, Del Bove, & Caprara, 2007), determines the types of coping strategies adopted (Schwarzer, 2014), and promote prosocial beliefs (Caprara, Alessandri, & Eisenberg, 2012). Deficits in any of these components commonly underlie the motivations of school refusal, so it can be projected that the lower one's perceived self-efficacy the higher the tendencies are to sustain the maladaptive behaviour.

1.3. Justification of Study

In the recent years, Malaysian authors have started to recognize the significance of diversifying the focus onto commonly occurring challenging behaviour of students that are faced by educators in schools (Choo, Dunne, Marret, Fleming, & Wong, 2011; Ismail, Jaafar, Sidi, Midin, & Shah, 2014; Nik

Ruzyanei et al., 2013; Shamsul Azhar, Azura, Azimatun Noor, & Mohd Rohaizat, 2012). School refusal amongst Malaysian students has been receiving increased attention, an encouraging outcome of the diligent efforts of the Child and Adolescent Mental Health Services at psycho-educating administrators of the various levels of the education department and schools, also the parents and community (Siti Rohana, Aida Harlina, Ek Zakuan, & Wan Salwina, 2014). To date, there is no available assessment tool validated for use in the Malaysian population and the need of self-rated questionnaires, like the School Refusal Assessment Scale-Revised (Kearney, 2002), the Self-Efficacy Questionnaire for School Situations (Heyne et al., 2007) or the School Anxiety Inventory (García-Fernández, Inglés, Martínez-Monteagudo, Marzo, & Estévez, 2011) is blatant. The commonplace practice of performing cross-sectional semi-/ unstructured clinical assessment of students with school refusal may be the only option at many mental health service centres in which constraints on time, logistics and manpower hinder alternatives like conducting home and school visits to explore for contributing factors, or having play therapy sessions to engage a child with concurrent selective mutism. Added values of a measurement tool specifically designed for school refusal would enable objective scoring across raters and time, hence avoiding unwarranted reliance on possibly biased subjective decree.

Instead of focusing on a clinical group of school refusers, a more general community study that recruits general population samples is the choice of this research. Moreover, evidence that emerged from non-clinical samples of school non-attenders were that school refusal and truancy designations were

arbitrary in the community, and a classification of mixed school refusers exists in addition to pure anxious school refusers and pure truants (Egger et al., 2003; Lyon & Cotler, 2007). The justification for choosing a community sample is therefore to achieve the closest possible representation of the reference population of children and adolescents of school-going age in Malaysia. This study targets 10–11 year olds who are in their vital years of education, prior to their progress into secondary education. The aim of this study is to examine the validity and reliability of the Malay version of the Self-Efficacy Questionnaire for School Situations (SEQ-SS) among school-going early adolescents in primary schools of Kota Bharu district, while taking into account the interplay of local demographic profiles.

1.4. Research Questions

- i. Is the Malay version of the Self-efficacy Questionnaire for School Situations (SEQ-SS) valid and reliable to be used in Malaysian population?
- ii. Is the Malay version SEQ-SS stable across time?
- iii. Are demographic variables associated with the perceived self-efficacy of early adolescents from primary schools in Kota Bharu?

1.5. Study Objectives

1.5.1. General Objectives

To determine the validity and reliability of the Malay version of the Self-Efficacy Questionnaire for School Situations (SEQ-SS) and the

association between demographic variables with the perceived self-efficacy among early adolescents in primary schools of Kota Bharu district.

1.5.2. Specific Objectives

- i. To determine the validity and reliability of the Malay version Self-Efficacy Questionnaire for School Situations (SEQ–SS) using exploratory factor analysis.
- ii. To determine the validity and reliability of the Malay version Self-Efficacy Questionnaire for School Situations (SEQ–SS) using confirmatory factor analysis.
- iii. To determine the stability of the Malay version Self-Efficacy Questionnaire for School Situations (SEQ–SS) with test–retest analysis.
- iv. To determine the structural relationships between demographic profiles with perceived self-efficacy.

1.6. Research Hypothesis

- i. The Malay version of the Self-Efficacy Questionnaire for School Situations is a valid and reliable measurement tool for a population of primary school students in their early adolescence.
- ii. The Malay version SEQ–SS is stable across time for population of primary school students in their early adolescence.
- iii. There are significant associations between demographic profiles with perceived self-efficacy in early adolescents.

1.7. Limitation of Study

Given the constraints of time and resources, this study was delimited to only five schools in one district in Kelantan, thus restricting the generalizability of this study to Malaysian early adolescents in other states where there may be great diversities in ethnicity distribution (e.g., in East Malaysia compared to Peninsular Malaysia), socioeconomic and cultural backgrounds (e.g., in the East Coast states of Peninsular compared to the states on the West Coast).

Another limitation is the need to narrow the age of participants to only 10 and 11 years. Early adolescence broadly encompasses ages of 10 and 14 years. Nevertheless, permission for recruitment of participants age 12 years was not approved by the Ministry of Education to avoid disrupting their preparation for the Primary School Achievement Test. Time and resources also delimited the study to only primary schools, and thus participants aged 13 and 14 years who had already transitioned into secondary school were not included.

1.8. Summary of Study Overview

This chapter introduced the study's background and the justification its purpose. The research questions, objectives and limitations were also demarcated here. Chapter Two would bring to perspective the theories fundamental to relate self-efficacy and the problem of school refusal, together with the influence of the individual's social environment. The study methods, statistical procedures and ethical considerations would be outlined in Chapter Three. Chapter Four would present all findings, reorienting them to study objectives and hypothesis. The

concluding Chapter Five would discuss the interpretations of the results, comparing and contrasting with present literature.

CHAPTER 2

LITERATURE REVIEW

2.1. Introduction

The chapter would begin with a chronological reiteration of the phenomena of school refusal behaviour because ultimately this study paves the preliminary steps towards the research on school refusal in Malaysia. Various systems and models to explain the school refusal behaviour will be discussed to compare the different tenets and facilitate understanding of why a measure based on the cognitive model was elected to be validated in the local population. Thereafter, the focus would shift into the theoretical and conceptual groundworks of the self-efficacy concept, which would be the emphasis of the current study. Self-efficacy would be discussed in greater details the perspective of early adolescence development, and from there linked to school-going experiences.

2.2. Search Terms and Databases

An initial search of published literature was performed in August 2014 on the following online databases Google Scholar, Science Direct, EBSCOHost, and Proquest. Main keywords were sub-grouped into broad themes of School Refusal, Self-efficacy and Malaysian. The following search terms were used on all databases: 'early adolescence', 'school attendance', and 'truancy' and 'school refusal' for the first category. Literature on Self-efficacy used the combinations of 'adolescence', 'academic', 'social', and 'school'. Finally, the term 'Malaysia' was added to the above two groups of searches. Further

sources were identified after consulting the original author for recommendations, and references within the literature retrieved in the initial search. Search was repeated for new references in September and October 2016 using the limit 'since 2015'.

2.3. School Refusal

2.3.1. Symptomatic and Functional Models

When a phenomena very similar to our current understanding of school refusal was first described in the twentieth century, it had been grouped under truancy. Two children, aged 9 and 13 years old, were reported to develop a sudden change in attitude towards school. From their initial reasonable comportments, they transformed to fearfulness and despair, resulting in consistent absenteeism from school for months to years, opting instead to remain at home (Broadwin, 1932). The emphasis conveyed at that point had been that this form of truancy arose from neuroses, obsessional thoughts or urges, and psychodynamic conflicts of the immature ego. The condition was gradually refined and contrasted from delinquent truancy by the change in nosology to school phobia, with the basis that anxiety in the child and a pathological maternal–child relationship underpinned the syndrome (Johnson et al., 1941). An early study reported that out of 50 children followed–up for persistent non–attendance at school, the mean age was 11.8 years, the majority were the only or youngest child, boys outnumbered girls (62% and 38% respectively), mean intelligence quotient (IQ) was 106.4 and presence of parental psychiatric disorders or maladaptive parenting traits (Hersov,

1960). In a narrative review by Lang (1982), an evolving trend in conjecturing the causes of the school refusal behaviour was traced from separation anxiety and over-dependency between mother-child, to subclinical depression in the child and parental psychiatric disorders. He then expanded on the understanding of school refusal by introducing the dysfunctional social system in which difficulties can be identified on three levels – the child, the family and the wider social context.

In the 1990s, there was a shift in the attention towards a functional model that could guide individualized treatment plans of a school refuser. All prior classifications had been symptoms-oriented, giving the impression that school refusal is a concrete clinical phenomenon, but without conveying vital information about the more abstract interpersonal interaction system in which the child is immersed in, the motivations that maintain the behaviour and therapeutic effectiveness after appropriate treatment given. The authors of the School Refusal Assessment Scale (SRAS) distinguished negative and positive reinforcements that contributed to maintaining the school refusal behaviour, and these two dimensions correlated well with internalizing/ externalizing behaviours as well symptoms of anxiety/ depression and oppositional problems respectively (Kearney & Silverman, 1993). Examples of negative reinforcers which provoke avoidance responses were being afraid of something related to school (e.g. tests), feeling sad when at school and having bad feelings when thinking about school on weekends. Examples of negative reinforcers that would trigger the need to escape the situation were the

need to speak with other kids at school, feeling embarrassed in front of others at school and not having many friends in school. Situations like preferring to be with parents than going to school, going to school with accompaniment of parents and preferring to be taught by parents at home fell under positive reinforcements that were related to the pursuit of attention. A final group that reflected the play of positive reinforcement in maintaining the school refusal behaviour were situations in which the child pursued fun things outside school.

Pilot attempts had been made to translate the SRAS into a Malay version, but the scale lacked conceptual clarity after translation of the items from English to Malay language, possibly because of the sociolinguistic diversity (A. Othman, personal communication, September 3, 2014). Items like “How often do you feel you would rather be with your parents than go to school” and “How much would you rather be with your family than go to school” seemed to be potentially misinterpreted as similar had the child not exercised caution when reading them. Several items appeared too hypothetical, for example, “How much more do you have bad feelings about school compared to other kids your age”, “How often do you stay away from people at school compared to other kids your age”, “Would you like to be home with your parents more than other kids your age would”, and “Would you rather be doing fun things outside of school more than most kids your age”, rouse the concern that the variation in levels of abstract thinking among early adolescent may affect their answers

(Dumontheil, 2014). Due to the incongruities identified during face validity of the SRAS, further efforts at translation of the scale was not pursued.

2.3.2. The Cognitive Model

Parallel to the functional model, the cognitive model also recognized how essential it was to create understanding on school refusal behaviour that extended beyond clinical symptoms. Expanding on Albert Bandura's triadic reciprocal model (human behaviours are influenced by cognition and other personal factors, as well as the environment), school refusal was viewed beyond the unidirectional operant conditioning of the functional model (Bandura, 1989b; Heyne et al., 1998). Events in the environment will be filtered by cognitive processes, which then confer meanings onto these external stimuli, conferring them with specific emotional bearing and motivating drive, which will be integrated into a cognitive model that would then guide judgment and behaviour (Bandura, 1989b). The effects of these actions that were carried out then form a feedback loop, which would serve as a form of observational learning for modelling of future actions. The equation does not stop there because there would also a continuous and concurrent interchange of observational learning in the form of mimicry of behaviours observed in others or abstract modelling of rules embodied in these observed behaviours, motivational incentives, self-regulation, moral standards and self-reflectivity (Bandura, 1989b).

Mansdorf and Lukens (1987) reported the earliest attempts to conceptualize school refusal behaviour in a combination of operant and cognitive processes. They described an intervention program carried out on 2 children with severe school phobia where the separation anxiety portrayed as the child's difficulty in regulating anxiety and environmental stimuli, whilst the manifestation of school refusal was maintained by the parents' reinforcing the child's maladaptive coping behaviour (Mansdorf & Lukens, 1987). This notion was then developed extensively by Heyne et al. (1998) in the form of the Self-Efficacy Questionnaire for School Situations (SEQ-SS) which explored the school refuser's beliefs on his ability to cope with various school-related circumstances as an initial step in formatting an individualized treatment plan (Heyne & Sauter, 2013).

2.4. Self-Efficacy

A person's functions (thoughts, feelings, actions and motivation) were observed to be controlled by self-regulatory mechanisms that were in continuous interaction with external sources of social norms and demands (Bandura, 1991, 1993). These processes of personal agency operate through self-monitoring, self-judgment and self-reaction. Strongly influencing the system are one's beliefs about their abilities to attain specific goals or effect certain levels of performance, termed perceived self-efficacy (Bandura, 1994). This multidimensional phenomenon brings to light a dynamic anticipatory system involving cognitive processes that determines human functioning beyond the linear feedback of exogenous influences.

Perceived self–efficacy affects initiation and maintenance of behaviour via a two–component operational mechanism (Bandura, 1993):

- i. outcome expectancy, in which the individual estimates certain outcomes that would follow a behaviour, and
- ii. efficacy expectations, determined by how confident the individual is that the behaviour to generate the outcomes can be successfully executed.

Even when a individual has ample motivation and skill to pursue a behaviour, efficacy expectations remains a major determinant of its execution (Bandura, 1977). Fear and avoidance of situations occur when an individual perceived the circumstances involved as exceeding his/ her skills. On the other hand, there is usually confident participation in activities if the situation is judged to be within the individual's capabilities. For the former group who cease their efforts prematurely, the fears and self–incapacitating expectations will further diminish their sense of efficacy. In the latter, experiences from the executed behaviours enhance individual sense of personal mastery, and eliminate negative defenses. How determined one is of his own abilities to deal with certain tasks would make a difference in how he feels, thinks and acts.

A differentiated set of personal efficacy beliefs exist for each individual, and may vary greatly in diverse functioning domains, i.e. high social self–efficacy, but low parenting self–efficacy. This multifacet nature of efficacy beliefs necessitates very specific measures to comprehensively assess one's perceived efficacy (Artino Jr, 2012; Bandura, 2006). In relation to children and adolescents, an example to portray the complexity of interdomains that exist

within a larger realm of functioning would be academic self-efficacy. An individual's perceived academic self-efficacy would reflect how certain they are that they can complete schoolwork and successfully fulfil other academic tasks (Schunk, 1991). Within the academic setting, personal agency can be further specified into efficacy for self-regulated learning (Bandura, 1989a), efficacy for writing skills (Shell, Murphy, & Bruning, 1989), mathematics problem-solving efficacy (Fajares & Kranzler, 1994), and many others.

Self-efficacy, being closely related to motivation, is known to be dynamic and contextual instead of a constant attribute (Linnenbrink & Pintrich, 2002). Variations are seen in the strength of efficacy beliefs, and the importance within the full range of efficacy network. They can be inherently influenced by mastery and vicarious experience, verbal persuasion or social influences, and physiological and affective states (Bandura, 1997). The triadic reciprocity illustrates this multidirectional interaction between personal factors and environmental factors to produce behaviour outcomes. Personal factors like mastery experiences (i.e. sense of efficacy boosted by success but weakened by failures), or affective and internal biological state (e.g. mood and physical discomforts bias sense of efficacy) modulate one's self-efficacy beliefs. Environmental factors exert their impact onto efficacy beliefs through vicarious experiences (i.e. observational learning and modelling influences, as well as social comparisons). Verbal persuasions can be from both internal conversations e.g. self-talk or from external sources e.g. evaluative feedback, motivating speeches) (Bandura, 1998).

The development of self-efficacy begins from infancy, launched by interactions and circumstances within the family. Parental responsiveness, involvement, demandingness and degree to which they are autonomy-supportive are clear predictors of a child's competence, from as early as three years old. Competent, spontaneous and mature preschoolers had loving but firm and demanding parents, whereas parents who were ambivalent in their affection and established laxity in control had children who were dependent and immature (Baumrind, 1967). Children from families with higher financial and material resources have richer experiences that would enhance their self-efficacies from younger age (Schunk & Meece, 2006).

The transition from childhood to adolescence comes with greater expectations for self-regulation and self-evaluation, time management, goal setting and problem solving. Stronger self-efficacy would contribute to greater resiliency in facing these challenges, and the mastery experiences would further refine personal agency (Zimmerman & Cleary, 2006). Parents and teachers continue to play major roles in cultivating personal capabilities in adolescents through vicarious experiences and social persuasion. A sound establishment of efficacy beliefs in adolescents would secure independence and self-sufficiency in adulthood (Zimmerman & Cleary, 2006).

2.5. Gaps in Literature

A wealth of research had been conducted on the Malaysian scene of school truancy over the past decade revealing high associations with substance use problems and a history of being bullied at school (Norzawati et al., 2016), externalizing syndromes which included delinquency and violence (Nik Ruzyanei et al., 2013), high risk behaviours (Shamsul Azhar et al., 2012), and school teaching methods that were perceived as authoritarian (Ishak & Low, 2013b). Local knowledge on the problem of school refusal remained scarce as students with prolonged school absenteeism were still categorized as truants. Furthermore, these studies on problematic school attendance had focused primarily on students in their mid–adolescence, and thus school refusers from younger age groups would already have been excluded by natural selection.

Contributing to the gap was the unavailability of a measure that was applicable to the general Malaysian school population and could objectively evaluate the factors that relate closely to school refusal behaviour. Instruments that had been translated to the Malay language were plentiful, however they assessed more general constructs. The Youth Self Report gauged competence in academic and social performances and screened for symptoms of psychiatric disorders (Nik Ruzyanei et al., 2013). The 10–module Global School–based Student Health Survey Module (World Health Organization, 2009) was designed to assess broad areas of physical and mental health, high risk behaviours relating to sexual habits, substance use and violence, as well as factors that were protective of adolescent health status. The Adolescent

Coping Scale (Omar et al., 2011) used by Shamsul Azhar et al. (2012) examined coping strategies but was not confined to school situations. A large number of Malaysian studies were cross-sectional surveys in design that used questionnaires devised by the researchers without providing information on the validity or reliability (Azmi et al., 2013; Ishak & Low, 2013a; Yahaya et al., 2010), thus rendering the results lower in generalizability.

2.6. Developing the Conceptual Framework

The existing theoretical basis of school refusal behaviour can be grouped into main schemes: firstly, symptomatic models; secondly is the operant conditioning model and thirdly, the cognitive model. Anxious school refuser fell under the symptomatic model because the focus had been on examining the child's mental health wellbeing, pathological parent-child relationships, difficulties in peer relationships and adverse experiences at home and/ or in school, in relation to the school refusal behaviour. Moving away from symptomatic models that tend to medicalize the symptom of school refusal into a syndrome or disorder, the operant conditioning model acknowledged that school refusal is essentially a maladaptive behaviour that is motivated and maintained by positive and/ or negative reinforcers. The more recent model was oriented towards cognitive processes of school refusers in which self-regulation of behaviours was postulated to be greatly influenced by one's perceived self-efficacy. These theories are combined into Figure 1 and they form the foundation of developing the conceptual model of this research.

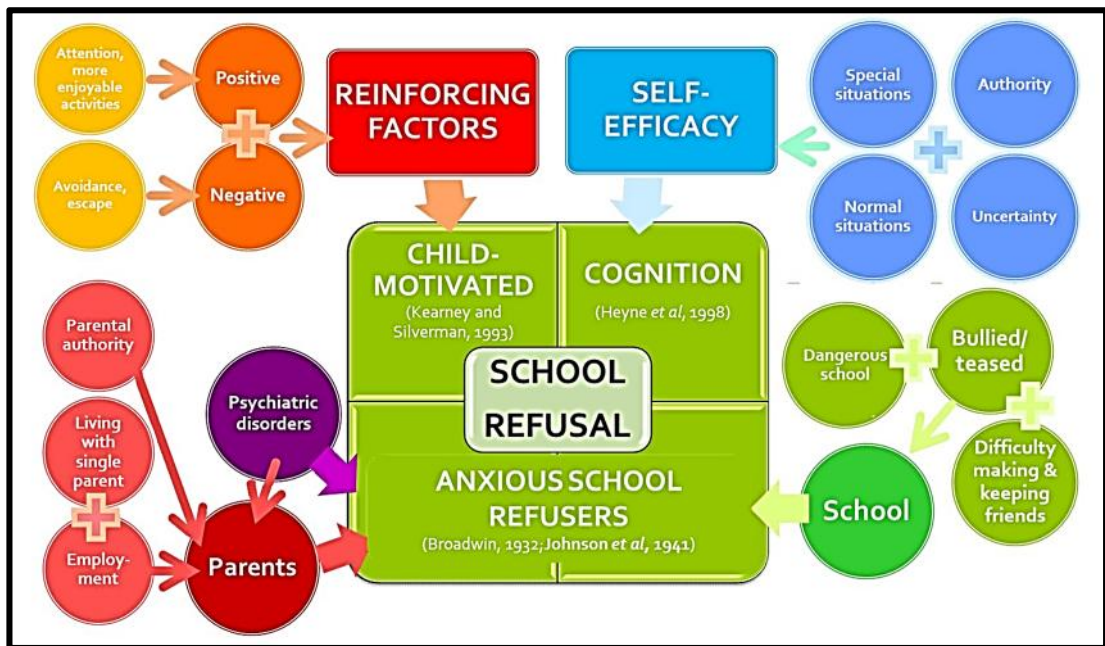


Figure 1. *Theoretical framework summarizing existing evidences on school refusal.*

This study delved into the cognitive model of school refusal, specifically self-efficacy of early adolescents. Paving the preliminary investigations into the phenomenon of school refusal within the local populace would be to produce a validated Malay questionnaire that could objectively quantify the different aspects of self-efficacy when faced with varying school-related situations among normal school-going students. The associations between exogenous demographic factors and self-efficacy of local early adolescents would also be examined (Figure 2).

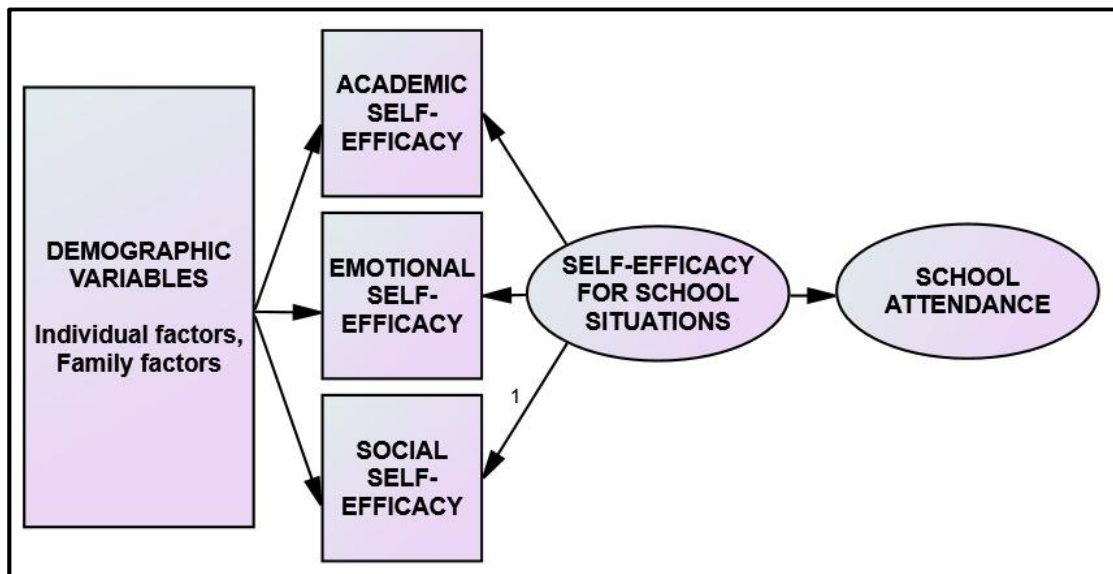


Figure 2. *Conceptual framework of interactions between perceived self-efficacy, demographic factors and schooling.*

2.7. Summary of Literature Review

A wealth of international studies exists on the issue of school refusal behaviour, however data on its status in Malaysia is scarce. School refusal is a commonly encountered clinical phenomenon, but assessment of these school refusers had been according to the symptomatic model which may not be suitable children and adolescent who do not yet manifest with diagnosable syndromes. Hence before launching into an in-depth research on school refusal, the need for an instrument that is valid and reliable to be used among Malaysian students must first be addressed. The foundation of the instrument of interest is the concept of self-efficacy for school situations. This concept had not been explored among local early adolescents, thus to unveil the structural relationships between self-efficacy and demographic factors would be a useful compass to guide future research on school refusal populations.